

Thomas Mulkern

U.S. Army Research Laboratory

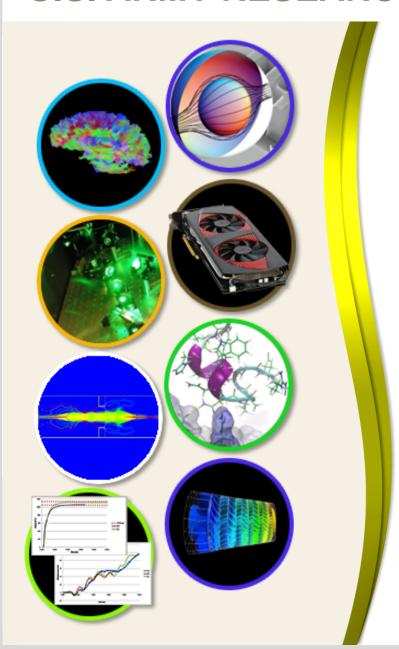
U.S. Army Research, Development and Engineering Command







U.S. ARMY RESEARCH LABORATORY



Vision

The Nation's Premier Laboratory for Land Forces

Mission

DISCOVER, INNOVATE, and TRANSITION Science and Technology to ensure dominant strategic land power

Making Today's Army And The Next Army Obsolete







The forecast data is for planning purposes, does not represent a pre-solicitation synopsis, does not constitute an invitation for bid or request for proposal, and is not a commitment by the government to purchase the desired products and services.



Associate Director Plans & Programs



Associate Director Science & Technology



Associate Director Laboratory Operations



Director

2 Star Equivalent



Military Deputy



Sergeant Major





1 Star Equivalent

Deputy Director
Basic Science
Director ARO



1 Star Equivalent

ARO - Extramural Basic Research

- Physical Sciences
- Life Sciences
- Information Sciences
- Engineering Sciences

Sensors & Electron Devices

1 Star Equivalent

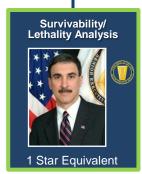
Materials Research

- Structural Materials
- Electronics
- Photonics
- · Energy & Power
- Biotechnology & Bio-Inspired
- High Strain Rate & Ballistic Materials
- Manufacturing Science, Processing & Sustainment



Information & Computational Sciences

- Predictive Simulation Sciences
- · Data Intensive Sciences
- Computing Architectures
- Computing Sciences
- Sensing & Effecting
- System Intelligence & Intelligent Systems
- Human & Info Interaction
- Networks & Communications
- Cyber Security



Assessment & Analysis

- Assessment of Science
 Technology
- Science & Technology Assessment
- Assessing Mission Capability of Materiel
- Materiel Capable of Assessing Mission Capability



Sciences for Lethality & Protection

- Lethality Research for Soldiers & Army Platforms
- Protection Research for Soldiers & Army Platforms
- Battlefield Injury
 Mechanisms



Sciences For Maneuver

- Energy & Propulsion
- Platform Mechanics
- Platform Intelligence
- Logistics & Sustainability



Human Sciences

- · Human-Physical Interface
- Human-Human Interface
- Human Technology Interface







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\ssessment and Analysis

ively Assess the development ar odologies to quantitatively asses select foreign combat systems

application of analytical tools the military utility of Army,

ARL S&T CAMPAIGNS

Extramural Basic ResearchSteering and oversight of the systematic study to increase fundamental knowledge and understanding in physical, engineering, environmental, and life sciences related to long-term national security needs.

Human Sciences

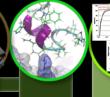
Fundamental understanding of Warfighter performance enhancement, training aids, and human-machine integration...











Fundamental understanding materials & devices **Materials Research**

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structural, electronic, photonic,

and energy

algorithms, and novel mathematical methods

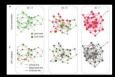
Fundamental understanding of computer hardware, high efficiency

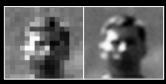
omputational Sciences



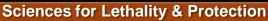
Information Sciences

Fundamental understanding of information generation, collection, assurance, distribution, and exploitation







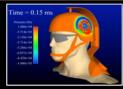


Fundamental understanding of emerging technologies that support weapon systems, protection systems, and injury mechanisms affecting the Warfighter













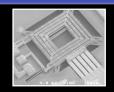


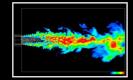


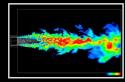


Fundamental understanding of the design, integration, control, and exploitation of highly adaptive platforms in complex environments.









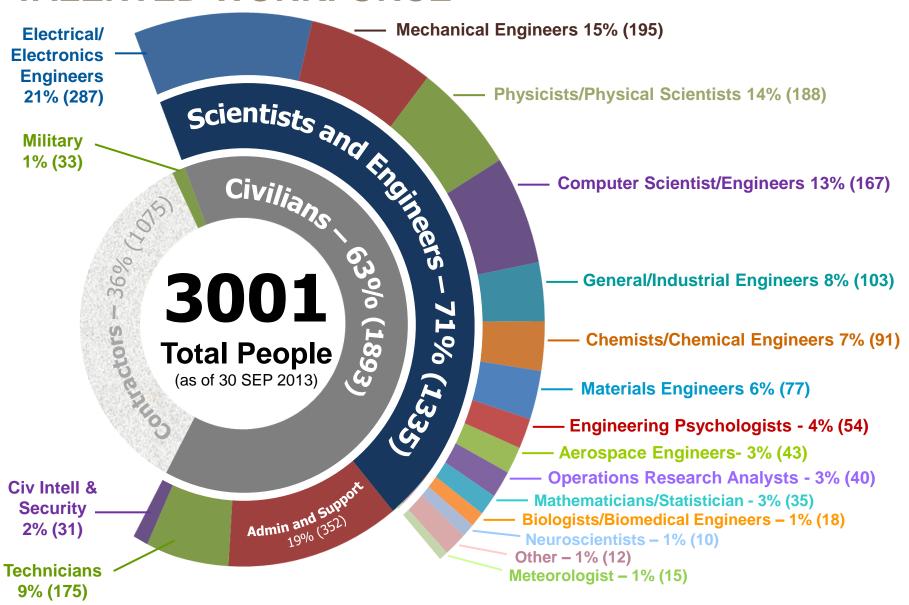








TALENTED WORKFORCE









MAKING A DIFFERENCE TO THE WARFIGHTER

Constant Hawk







MRAP Protection



Persistent Threat Detection System (PTDS)















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ENGAGEMENT OPPORTUNITIES

- ARL Open Campus
- Contracts
- Grants
- Cooperative Agreements (CA)
- Cooperative Research and Development Agreements (CRADA)
- Test Service Agreements (TSA)
- Patent License Agreements (PLA)
- Small Business Innovation Research (SBIR)
- Small Business Technology Transfer (STTR)







DEFENSE LABORATORIES

- Inspired by Thomas Edison's vision of "a great research laboratory" maintained by Government; NRL created in 1923
- In 1945, Bush's Science-the Endless Frontier became model for scientific pursuits

"There are certain kinds of research - such as research on the improvement of existing weapons - which can best be done within the military establishment. However, the job of long-range research involving application of the newest scientific discoveries to military needs should be the responsibility of those civilian scientists in the universities and in industry who are best trained to discharge it thoroughly and successfully. It is essential that both kinds of research go forward and that there be the closest liaison between the two groups."

Bush, Vannevar. Science-The Endless Frontier, A Report to the President. July 1945.

Current Defense Lab Model

Gates & High Walls provide 20th century security, but are barriers to 21st century innovation



Defense laboratories relatively unchanged since inception!







ARMY RESEARCH LABORATORY OPEN CAMPUS INITIATIVE



Responding to the National Security
Challenges of the 21st Century







OPEN CAMPUS





Open select spaces at ALC to include access to some unique facilities

- Collaborative networks and equipment by June
- Electronic security measures operational by Aug
- Develop plans to further open facilities at ALC, APG, and other sites

Infrastructure



 Develop umbrella agreements with new partners

- U of MD, U of TX, Texas A&M, UMass, UConn, MSU, USC, ASU, U of IL, PSU, BASF, PPG, Logos etc.
- Continue to leverage existing agreements
- Partnership Intermediary Agreement

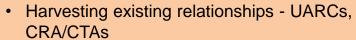




50-100 Academic,
Other Government
Agency,
and Industry
Partners by
Summer of 2014

Expanding and Developing Partnerships





- Attracting new partners via an Opportunities Document
- Small businesses incubator







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ARL CONTRACTING OPPORTUNITIES

Primary Interests:

Research and technology development efforts providing scientific and technological innovation in **ARL Technical Campaigns**

Contracting Officers are required to post solicitations and public notices regarding acquisitions to the fedbizopps and ASFI websites. It is highly recommended to monitor the following two sites to ensure that your business becomes aware of opportunities as early as possible:

https://www.fbo.gov/

https://acquisition.army.mil/asfi/







ARL BROAD AGENCY ANNOUNCEMENTS

Title of Solicitation	Solicitation Number	Date Posted	Closing Date
DOD FY 2015 DEFENSE UNIVERSITY RESEARCH INSTRUMENTATION PROGRAM (DURIP)	PA-AFOSR-2014-0001	September 2014	Closing Date - 17 November 2014 NLT 4:00pm ET
Defense Forensics & Biometrics Agency opens continuously from July 1, 2013 through June 30, 2015.	W911NF-13-R-0006	July 2013	White papers and full proposals - June 30, 2015
ARL Core Broad Agency Announcement for Basic and Applied Scientific Research for Fiscal Years 2012 through 2017	W911NF-12-R-0011-02	March 2013	31 March 2017
ARO Section of the ARL Core Broad Agency Announcement for Basic and Applied Scientific Research for Fiscal Years 2012 through 2017	W911NF-12-R-0012-02	March 2013	31 March 2017

www.arl.army.mil







OPPORTUNITY

TITLE: SIMULATION AND TRAINING ENGINEERING SERVICES (STES) SUPPORT

CONTRACT TYPE: Total Small Business Set-Aside IDIQ with CPFF CLINs

ESTIMATED VALUE: Not to exceed \$135M

CONTRACTING CONTACT: Briann Richardson, 407-384-3610, briann.l.richardson.civ@mail.mil,

SOLICITATION #: W911NF-15-R-0001

ESTIMATED SOLICITATION RELEASE DATE: 1QFY15







OPPORTUNITY

TITLE: Scientific Services Program (SSP)

CONTRACT TYPE: IDIQ with FFP and CPFF CLINs

ESTIMATED VALUE: Not to exceed \$94M

CONTRACTING CONTACT: Christopher Justice, 919-549-4287, christopher.d.justice4.civ@mail.mil

SOLICITATION #: Unknown

ESTIMATED SOLICITATION RELEASE DATE: 4QFY15







OPPORTUNITY

TITLE: Advanced Expeditionary Warfare Development- AEWD

CONTRACT TYPE: Multiple Award IDIQ with CPFF and FFP Task Orders

ESTIMATED VALUE: Not to exceed \$800M

CONTRACTING CONTACT: Emily Hobbs, 919-541-9475, emily.s.hobbs.civ@mail.mil

DRAFT SOLICITATION #: W911NF-14-R-0003

ESTIMATED FINAL SOLICITATION RELEASE DATE:1stQTR FY15







ACQUISITION POINTS OF CONTACT

Point of Contact (POC) for the Army Contracting Command Aberdeen Proving Ground – (ACC-APG) Adelphi Division

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